Work Order ID 54519 December 10, 2009 3:17:58 PM

Quality Control



Page 1

Item ID: D3179-041 Accept Setup Start Revision ID: Stop **Item Name:** Fwd Litter Tie Down Sart Qty: 4.00 Cust Item ID: **Start Date:** 10/12/2009 Required Date: 18/12/2009 Req'd Qty: 4.00 **Customer:** Reference: Run Start Tooling: Date: Approvals: Stop SPC (Y/N): QC: Date: Date: Operation Plan Reject Reject Set Up/ Draw Draw Accept Insp. Sequence ID/ Qty Number Description **Run Hours** Rev. Stamp Work Center ID Number Code Qty Draw Nbr **Revision Nbr** D3179 Rev C 0.00 100 BAND SAW 0 8/09/12/14 Bandsaw Memo Jeaspa Bandsaw Cut blanks: 12.150" long and 04/12/15 110 HAAS CNC VERTICAL MACHINING #1 0.00 HAAS I Memo 1- Mill as per Folio FA297 Rev: AA & Dwg D3179-1 Rev: C \square HAAS CNC vertical machine #1 Deburr per dwg D3179-1 120 QC2- Inspect parts off machine FAI/FAIB 0.00 ort 09/12/15 0.00 Memo

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W/O:	,		WO	RK ORDER CHANG	SES				
DATE	STEP	PRO	CEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	•	PAR #:		jory:	NCR: Yes	No DQ	1 A :	Date:	
••	Resolution: Disposition: QA: N/C Closed:								
NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B			ation	Approval	Approval
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Work Order ID 54519

Page 2

December 10, 2009 3:17:58 PM

Required Date: 18/12/2009

Item ID:

D3179-041

Accept



Setup Start

Stop



Revision ID:

Item Name:

Fwd Litter Tie Down

Start Date:

10/12/2009

Start Qay: 4.00

Req'a ty: 4.00



Cust Item ID:

Customer:

Start

Reference:

Approvals:

Process Plan:

Date: Date: Tooling: SPC (Y/N): Date:

Date:

Stop

Run

Sequence ID/

Work Center ID

130

QC

Quality Control

Operation

0.00

Set Up/ **Run Hours** Draw Number

Draw Rev.

Plan Code

Accept Qty

Reject Reject Qty Number

Insp.

Stamp

140

HandFinish

Hand Finishing

Description

QC8- Inspect parts - second check

Chemical Conversion Coat per QSI005 4.1

Memo

Memo

0.00

0.00

0.00

150

Memo

QC3- Inspect Part Finish

0.00

Bl 09-04-12-17

Quality Control

Dart Aerospace Ltd

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W/O:			W	VORK ORDER CHANG	ES			,
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Resolution:			Disposit	ion:	_ QA: N/C CI	osed:	Date: _	
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DATE	STEP	Description of NC	Corrective Action		tion B	Verification	n Approval	Approval
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Work Order ID 54519

Page 3

December 10, 2009 3:17:58 PM

Required Date: 18/12/2009

Item ID: Revision ID: D3179-041

Accept

Setup Start



Stop

Item Name: **Start Date:**

10/12/2009

Fwd Litter Tie Down

Start Qty: 4.00

Req'd Qty: 4.0 J

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: _____

Date:

Tooling:

0.00

0.00

Date:

Run Start

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

160

Powdercoat

Powder Coating

Operation Description

White Gloss(Ref;4.3.5.1) per QSI005 4.3-Alum

11113170

Memo

Set Up/ **Run Hours**

Draw Number Draw Rev.

Plan Code

Accept Qty

Reject Reject Qty

Insp. Number

Stamp

□OVEN TEMPERATURE:

Bl09-12-17

170

QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

180

Small Fab Small Fab

Small Fab

Memo

0.00

0.00

Assemble as per Dwg D3179

GB09/2/21 Q

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Work Order ID 54519



Page 4

December 10, 2009 3:17:58 PM

Required Date: 18/12/2009

Item ID:

D3179-041

Accept



Setup Start

Stop



Revision ID:

Item Name:

Fwd Litter Tie Down

Start Date:

10/12/2009

Start Qty: 4.00

Reg'd Qty: 4.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: _____ Date: ____

Tooling: SPC (Y/N):

0.00

0.00

Date: Date:

Run Start

Stop

Sequence ID/ Work Center ID

190

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Date:

Set Up/ **Run Hours** Draw Number Draw Rev.

Plan Code

Accept Qty

Reject Qty

Reject Number

Insp. Stamp

200

Packaging

Packaging

Identify as per dwg & Stock Location:

Memo

Memo

0.00

0.00

210

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

rd09112121

W/O:				WORK ORDER CHANGES										
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Picklist Print

December 18, 2009 9:16:44 AM

Work Order ID: 54519

Parent Item: D

D3179-041

Parent Item Name: Fwd Litter Tie Down

Comments:



Start Date: 12/10/2009

Required Date: 12/18/2009

Page 1

Start Qty: 4.00

Required Qty: 4.00

Comments:									start Qty. 4.00		Required Qty.	
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2372		Manufactured	No				Each	10.0000	8.0000	1509	12/21	
Quick Release			•	Wareho	<u>use</u>	Loc	<u>Oty</u>	Loc Code			1	
				Loca	<u>ıtion</u>							
				Main Wa	ırehouse							
				ST			10		_	/		
					41426		10		<u> </u>	70		
D2444		Manufactured	No				Each	11.0000	4.0000	el	1.10.	
Pip Pin Assembly										309 [/	12/21_	
Pip Pin Assembly				Wareho	<u>use</u>	Loc	<u>Oty</u>	Loc Code				
				Loca	ation							
				Main Wa	arehouse							
				ST			11			· · · · · · · · · · · · · · · · · · ·		
					43978		1		_	1		
					45387		2			B 2		
D(301		M 6 1	No		54533		8 f	20.0000	4.0000			
D6201		Manufactured	INO				1	20.0000	4.0000			
"T" Extrusion				<u>Wareho</u>	use	Loc	Oty	Loc Code				
				Loc	ation							
				Main W	arehouse						94	2
				MA	T		20		<u>.</u>			ا : ا
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Dart Aerospace Ltd

W/O:			N	ORK ORDER CHANG	GES		-			
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Picklist Print

December 18, 2009 9:16:44 AM

Work Order ID: 54519

Parent Item:

D3179-041

Parent Item Name: Fwd Litter Tie Down

Comments:



Start Date: 12/10/2009

Required Date: 12/18/2009

Page 2

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
Item Name	Item ID	Purch	Item	Location	Location	Seq ID	Measure	Hand	Qty To Pick	Issued	Issued	
MS21042L3		Purchased	No				Each	2,477.000	4.0000	91	//	

Nut

Warehouse	Loc Qty	Loc Code	
Location			
Main Warehouse			1
ST	2477		1
110844	35		-
111274	27		1
111668	64		•
112314	1851		1
112385	500		ļ
	Each	109.0000	4.0000

MS27039-1-13

Purchased No



Screw

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	109	

100

105211

110844

Dart Aerospace Ltd

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W/O:			WC	RK ORDER CHA	NGES					
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Part No	:	PAR #:	Fault Cate	gory:	NC	R: Yes	No DQ	\ :	_ Date: _	
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Picklist Print

Page 3

December 18, 2009 9:16:44 AM

Work Order ID: 54519

Parent Item:

D3179-041

Parent Item Name: Fwd Litter Tie Down

Comments:



Start Date: 12/10/2009

Required Date: 12/18/2009

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name

Replacement Mfg/ Item ID

Purch

Bin Primary Item Location Last Location

Route Seq ID

Unit of Measure

Qty on Hand

Remaining Qty To Pick Issued Date Issued

Status

NAS1149D0332J

Purchased

No

Each

530.0000

12.0000

Washer

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	530	
110625	16	
110844	114	
112794	200	
113237	200	



Qty

Dart Aerospace Ltd

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December 10, 2009 3:18:03 PM

Work Order ID: 54519

Parent Item:

D3179-041

Parent Item Name: Fwd Litter Tie Down



Start Date: 10/12/2009

Required Date: 18/12/2009

Comments:								5	Start Qty: 4.00		Required Qty: 4	.00
omponent Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Præary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
DEZO/- O Litter Tie Down Assembly	12 July	Manufactured	No	B453	500.X°	parts.	Each	0.0000	2.0000	- 81	804/12	/14
D3179-041		Manufactured	No				Each	5.0000	2.0000			
rwd Litter Tie Down				<u>Wareho</u> Loc	use ation	<u>Loc (</u>	<u>Oty</u>	Loc Code	•			
		MAY.			arehouse		5		·			
D350-616-015	RIE OM ALCON BOIN MODE DIN	Manufactured) No		45324		5 Each	4.0000	2.0000 IIIIIIII			
Deck Plate	111 100 1100 1100 1100 1100 1100 /											
				Wareho Loc	ouse ation	Loc (<u>Qty</u>	Loc Code				
				Main W FG	arehouse		4					
					44006 44640		1 3		_			

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DART AEROSPACE LTD	Work Order:	34519
Description: Fwd Litter Tie Down Bracket	Part Number:	D3179-1
Inspection Dwg: D3179 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

	X	First Arti	cle	Prot	otype		•
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Co	mments
1.00	+/-0.030	1.000					
Ø0.242	+0.005/-0.001	8.243					
R0.40	+/-0.030	R-400					
0.375	+/-0.010	.362				extru	sion Sine
. Ø0.191	+0.005/-0.001	0.193					<i>O</i> -
1.00	+/-0.030	(.000	/				
1.70	÷/-0.030	1.470					
4.00	+/-0.030	3.770					
1.50	+/-0.030	1.500					
0.750	+/-0.010	.748					
1.50	+/-0.030	1.500					
10.500	+/-0.010	10.500					
4.250	+/-0.010	4.247					
0.750	+/-0.010	.748					
1.000	+/-0.010	1.000					
12.00	+/-0.030	12.000					
1.00	+/-0.030	1.000				ļ	
8.00	+/-0.030	8.000					
Ø0.191	+0.005/-0.001	8.192					
R0.37	+/-0.030	R.370				ļ	
0.97	+/-0.030	. 96 le			: _ 	ļ 	
1.86	+/-0.030	1.866		7 1	7		
1.750	+/-0.010	NI	9 -	[ov]	09.120	15	9
0.375	+/-0.010	.366		/			
2.875	+/-0.010	2.873				ļ	
0.500	+/-0.010	, 497				ļ	
1.250	+/-0.010	1.257					
1.625	+/-0.010	1.628					
3.31	+/-0.030	3.306		2			
Measured by:	and	Audited by:	Coll		Prototype A	pproval:	N/A
Date:	09/12/15	Date:	09.12	2.15		Date:	N/A
Rev Date	Change	5/0 50470 0	44			evised by J/DD X	Approved
A 09.04.05	New Issue	P/O D3179-0	147		, K	טטוני.	7 - PX

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Item Qtv Part Number Description -041 D3179-041 FWD LITTER TIE DOWN QUICK RELEASE D2372 PIP PIN 1 D2444 LITTER TIE DOWN BRACKET D3:79-1 MS21042L3 NUT MS27039-1-13 SCREW WASHER (OR AN960JD10L) 3 NAS1149D0332J

D

В

D2444 MS27039-1-13 SCREW PIP PIN NAS1149D0332J WASHER, 3 PL MS21042L3 NUT D3179-1 LITTER TIE D2372 QUICK DOWN BRACKET RELEASE 2 PL -

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER NO. 54519-

D3179-041 FWD LITTER TIE DOWN BRACKET

08.11.07 WAS D3179 (ZN A5-2); REMOVE ENGRAVE P/N В REFORMAT DRAWING; FINISH WAS ANODIZE DC 07.06.06 Α **NEW ISSUE** RF 02.12.09 REV. DESCRIPTION BY DATE DESIGN BW DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWN RF CHECKED DRAWING NO. REV. C MFG. APPR. D3179 SHEET 1 OF 2 APPROVED TITLE SCALE LITTER TIE DOWN BRACKET DE APPR. COPYRIGHT @ 1995 BY DART AEROSPACE LTD DATE 08.11.07

NOTES: 1) D3179-041 WEIGHT: 2.79 lbs

6

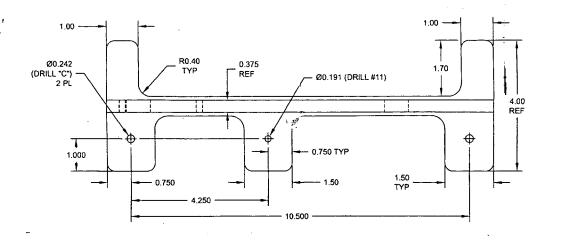
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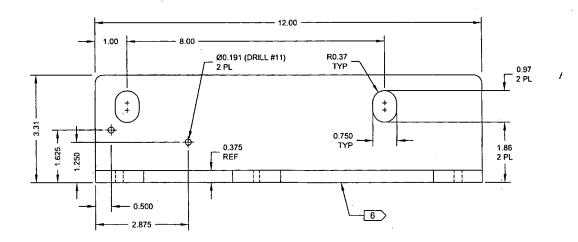
ADD D3179-041 & PART LIST (ZN B6-1, D2-1); D3179-1

Dart	Aero	spac	e Ltd

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D3179-1 LITTER TIE DOWN BRACKET

NOTES: 1) MATERIAL: MAKE FROM D6201-012 EXTRUSION (6061-T6/T6511 PER QQ-A-200/8)

B) 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART P/N D3179-1 USING FINE POINT

PERMANENT INK MARKER ON THE BOTTOM FACE .

7) WEIGHT: 2.3 lbs

	/	$\mathcal{O} / \mathcal{O} - \mathcal{O} / \mathcal{O} - \mathcal{O} / \mathcal{O}$				
DESIGN	BW .	DART AEROSPACE LTD				
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA				
CHECKED	PH 1	DRAWING NO.	REV. C			
MFG. APPR.	Call	D3179	SHEET 2 OF 2			
APPROVED		TITLE	SCALE			
DE APPR.	#-	LITTER TIE DOWN BRACKET	NTS			
DATE OD	14.07	COPYRIGHT @ 1995 BY DART AEROSPACE LTD				

08.11.07

	Dart	Aeros	pace	Ltd
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Resolution:		Disposit	Disposition:		QA: N/C Closed:			Date:	
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